The Action states with regard to former Claim 3:

> Graizzaffi teaches a tool and a method for remotely turning a key to actuate an ignition of a vehicle, including a key unit in fig. 2 and 3 including an engagement assembly 5, 6, 17, 3, 19 in fig. 2 or 26, 27, 17, 3, 19 in fig. 3 adapted to engage the key 2, and a cable segment 15 for rotating the key unit. With respect to claim 3, Graizzaffi et al also teaches a first cable segment labeled 15 in figure 2, and a second cable segment opposite the knot at the rightmost end of the cable in fig. 2. Lankford teaches an operator unit control assembly 33 at the end of the cable segment to actuate the key unit 16. Berry teaches that it is well known to provide an operator unit defined by control assembly knots 7 to actuate a cable segment. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide an operator unit for manually actuating the cable 15 of Graizzaffi et al, in view of the teaching of either Lankford or Berry, the motivation being to simplify the manually pulling/grasping actuation of the cable.

Claim 1 as now presented is clearly distinguishable from the cited art. The devices of Graizzaffi and Lankford are each constructed such that they only enable the operator to rotate the key in one direction. That is, the key can be turned in one direction by pulling the cord, but no provision is made for turning the key in the opposite direction. Berry discloses a view limiting enclosure assembly for dial combination locks and in no way teaches or suggests a device for remotely turning a key. While Berry uses a rope having two exposed end segments to rotate the lock, each segment being pulled to rotate the lock knob in opposite directions, there is no reason apparent from the art of record why one of ordinary skill in the art would have been motivated to modify the device of Graizzaffi to employ such an arrangement. Even if, *arguendo*, such a motivation were recognized, it is not apparent how the ordinarily skilled artisan might effectively accomplish the modification.

Accordingly, Applicant respectfully submits that Claim 1 is allowable over the cited art and allowance of Claim 1 is requested.

Claims 2 and 3:

Claim 2 corresponds to original Claim 12 and has been amended as follows:

d) wherein the control assembly includes a rotatable knob and the tool is operative to rotate the engagement assembly responsive to rotation of the rotatable knob.

Neither rotation of the loop 33 of Lankford nor rotation of the knots 7 of Berry will cause a corresponding engagement assembly to rotate as claimed. Accordingly, Claim 2 as now presented is clearly allowable over the cited art. Claim 3 depends from Claim 2 and is therefore allowable as well for at least this reason.

Claims 4-6:

Claim 4 corresponds to original Claim 14, and has been amended as follows:

d) wherein the engagement assembly includes at least one set screw adapted to frictionally engage and hold the key.

The set screw 3 of Graizzaffi secures the Graizzaffi device to the key 2 by passing through the key. The set screw 3 does not frictionally engage the key 2. Accordingly, Claim 4 as now presented is clearly allowable over the cited art. Claims 5 and 6 depend from Claim 4 and are therefore allowable as well for at least this reason. Claims 5 and 6 are further distinguishable in that the device of Graizzaffi does not include a second set screw (Claim 5) or, more particularly, first and second set screws adapted to engage opposed sides of the key (Claim 6).

Claims 7-11:

Claim 7 recites:

7. A tool for remotely turning a key, the tool comprising:
a) a key unit including a key unit housing and an engagement assembly adapted to engage the key, the engagement assembly being rotatably mounted in the key unit housing;
b) an operator unit including a control assembly; and
c) at least one cable segment linking the key unit and the operator unit such that the engagement assembly can be mechanically rotated via the cable segment by manipulation of the control assembly to thereby rotate the key when the key is engaged by the engagement assembly.

The Graizzaffi device does not include any structure corresponding to the recited key unit housing. Rather, the entirety of the Graizzaffi device moves as a unit and no portion rotates relative to another. Thus, Graizzaffi does not teach or suggest a key unit including an engagement assembly rotatably mounted in a key unit housing. Accordingly, Claim 7 is clearly allowable over the cited art. Claims 8-11 depend from Claim 7 and are therefore allowable as well for at least this reason.

Claims 12 and 13:

Claim 12 corresponds to original Claim 17 and has been amended as follows:

> d) ~~including a~~ an inline spring connected to the cable segment to maintain a tension in the cable segment, wherein the spring is positioned in the cable segment between opposed ends of the cable segment.

The spring 12 of Graizzaffi is not positioned in the cable 15 between opposed ends of the cable 15. Nor is there any teaching or suggestion of such a construction in Graizzaffi. Accordingly, Claim 12 is clearly allowable over the cited art. Claim 13 depends from Claim 12 and is therefore allowable as well for at least this reason.

Claims 14-16:

Claim 14 corresponds to original Claim 19 and has been amended as follows:

> d) ~~including~~ a clutch mechanism adapted to limit the maximum load that can be applied to the key by the tool.

The Action contends that "the spring 12 of Graizzaffi et al also defines a clutch and limits the load applied to the key since it is flexible..." Applicants respectfully submit that this contention is not accurate. While the spring 12 may bend, it will nonetheless transfer the entirety of the load to the key (less some insignificant heat losses). In any event, Applicant has amended the claim to more clearly define over the cited art. The spring 12 of Graizzaffi does not limit the maximum load that can be applied to the key 2 by the Graizzaffi device.

Accordingly, Claim 14 is clearly allowable over the cited art. Claims 15 and 16 depend from Claim 14 and are therefore allowable as well for at least this reason.

Claim 15 is further distinguishable from Graizzaffi in that spring 12 does not in any way satisfy the recitation of a slippable clutch mechanism.

Claims 17-19:

Claim 17 corresponds to original Claim 23 and has been amended as follows:

> c) turning the key in a first direction by manipulating the control assembly to mechanically rotate the engagement assembly in the first direction via the at least one cable segment.
> d) turning the key in a second direction, different from the first direction, by manipulating the control assembly to mechanically rotate the engagement assembly in the second direction via the at least one cable segment.

As discussed above with regard to Claim 1, the cited art do not teach or suggest a tool as claimed that is operable to turn a key in each of first and second different directions. Accordingly, Claim 17 is clearly allowable over the cited art. Claims 18 and 19 depend from Claim 17 and are therefore allowable as well for at least this reason.

CONCLUSION

Applicant submits that the present application is in condition for allowance and the same is earnestly solicited. Should the Examiner have any matters outstanding of resolution, he is encouraged to telephone the undersigned at 919-854-1400 for expeditious handling.

Respectfully submitted,

David D. Beatty
Registration No. 38,071

USPTO Customer No. 20792
Myers Bigel Sibley & Sajovec, P.A.
Post Office Box 37428
Raleigh, North Carolina 27627
Telephone: (919) 854-1400
Facsimile: (919) 854-1401

CERTIFICATE OF EXPRESS MAILING

Express Mail Label No. EV 381448656 US
Date of Deposit: January 20, 2004

I hereby certify that this correspondence is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated above and is addressed to: Mail Stop PATENT APPLICATION, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Katie A. Chung